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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/625,511	07/24/2003	Hiroshi Ueda	240697US2	9012
22850	7590	04/06/2005		
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER NGUYEN, HOAN C	
			ART UNIT 2871	PAPER NUMBER

DATE MAILED: 04/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

10/625,511

Applicant(s)

UEDA ET AL.

Examiner

HOAN C. NGUYEN

Art Unit

2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 January 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) 12 and 13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 7/24/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Applicant's election of Group I and Species of Third Embodiment (Claims 1-11, Fig. 3) in the reply filed on Jan. 10, 2005 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claims 12-13 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention and species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on Jan. 10, 2005.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the features:

- the inspection pad are covered with resin which is an anisotropic conductive film (claims 1-4).
- the wiring substrate and the signal input pad on the insulating substrate are electrically connected by the anisotropic conductive film, and the wiring substrate covers the signal input pad and the inspection pad with the anisotropic conductive film interposed therebetween (claim 9).

must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et al. (US5748179) in view of Hotta et al. (US 6245175 B1).

Ito et al. teach (Figs 3 and 15) a display apparatus, comprising:

Claims 1 and 3:

- an insulating substrate SUB1;
- a signal line (ITO conductive films d1-d3) for transmitting a signal to a pixel formed in a display area composed of pixels on the insulating substrate;
- a driver integrated circuit (IC) mounted outside of the display area of the insulating substrate and electrically connected to the signal line; and
- an inspection pad (test pad TEST) formed outside of the display area of the insulating substrate, electrically connected to the signal line, and covered with an anisotropic conductive film.

Claim 4:

- a signal input pad formed outside of the display area of the insulating substrate, for inputting a signal from outside of the insulating substrate to the driver IC, wherein the signal input pad and the inspection pad are covered with an anisotropic conductive film as Fig. 15 shown.

Claims 5-8:

- a conductive extension line (between IC and FPC as Fig. 3 shown) connecting the signal line and the driver IC to the inspection pad.

Claim 9:

- a wiring substrate for inputting a signal from outside of the insulating substrate to the driver IC, wherein the wiring substrate and the signal input pad on the insulating substrate are electrically connected by the anisotropic conductive film.

and the wiring substrate covers the signal input pad and the inspection pad with the anisotropic conductive film interposed therebetween as Fig. 15 shown.

wherein

Claim 10.

- the wiring substrate is a flexible substrate (flexible board FPC).

Claim 11:

- the inspection pad and the signal input pad are substantially aligned along near an edge of the insulating substrate as Fig. 15 shown.

However, Ito fails to disclose the anisotropic conductive film made of the resin selected from the group consisting of silicon, acryl, urethane, epoxy, and polyimide (claim 2).

Hotta et al. teach the anisotropic conductive film made of the resin selected from the group consisting of silicon, acryl, urethane, epoxy, and polyimide for a higher strength and a higher heat resistance (col. 6 lines 33-41).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify a display apparatus as Ito et al. disclosed with the liquid crystal molecules above the polymer walls are aligned axially symmetrically with the anisotropic conductive film made of the resin selected from the group consisting of silicon, acryl, urethane, epoxy, and polyimide for a higher strength and a higher heat resistance as taught by Hotta et al. (col. 6 lines 33-41).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Tagusa et al. (US 5668700) disclose, by using the terminal as an inspection terminal and putting a probe pin for electrical inspection in contact with the terminal (inspection terminal), a function test of the IC chip and a connection test of the connection portions being performed in the middle of the assembling process.

Kuwashiro et al. (US5945984A) disclose the dummy output terminal or inspecting terminal mounted on the printed-wiring board adds to the strength with which the signal output terminals of the printed-wiring board are connected. When an external stress is applied, the possibility that the connection of the printed-wiring board is impaired is reduced.

Mori et al. (US5712493) disclose a display device may further comprising a plurality of testing terminals provided on the substrate along the other of the long sides of each of the driving semiconductor elements and respectively connected to the first and second output terminals.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HOAN C. NGUYEN whose telephone number is (571) 272-2296. The examiner can normally be reached on MONDAY-THURSDAY:8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim H. Robert can be reached on (571) 272-2293. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HOAN C. NGUYEN
Examiner
Art Unit 2871

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